



## IMPACT OF FAMILY-RELATED FACTORS ON STUDENTS' ACADEMIC PERFORMANCE: A STUDY CONDUCTED IN THE PLANTATION SECTOR SCHOOLS IN SRI LANKA

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### Abstract:

The major objective of this study was to ascertain the relationship between family-related factors and students' academic performance in Mathematics for secondary-level classes. This study was conducted in two districts in the plantation areas of Sri Lanka. A total of 702 students who were selected randomly responded to a questionnaire. Three hypotheses which were tested using correlational analyses revealed that there was a statistically significant relationship between family-related factors and academic performance of students. The finding leads to important implications to promote education of children in the plantation sector.

**Keywords:** family factors, parental involvement, academic performance, plantation schools

### 1. Introduction

Parental involvement, positive psycho-social environment of family and suitable physical environment at home are considered as an essential input for academic success of children. This is a general phenomenon all over the world irrespective of economic status of the countries. Proven by a number of studies, parents' contribution to their children's education has a consistent and positive effect on academic performance (Shukla et al., 2015; Chohan & Khan, 2010). In an educational perspective the term

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'parental involvement' is a broad concept and it refers to their involvement both at home as well as at school (Kimaro & Machumu, 2015). These include parenting style, parental expectations and aspirations, home rules and parental supervision, parents' attitudes towards children activities, helping with their homework, visiting the school to discuss with teachers, and also their beliefs regarding their child's education. In addition, studies emphasized that positive psycho-social environment in the family and suitable physical environment and resources at home would lead to better performances of students (Dharmawardhana, 1995; Zarookdeen, 2008; Porumbu & Necsoi, 2013 as cited in Kimaro & Machumu, 2015, pp.483). Based on the above it is obvious that the role of family i.e. parents' role is very important of a child's performance in schooling as well as betterment of their future life.

### **1.1 Literature Review**

Various studies were conducted to examine the influence of family factors on academic success of students. Seng et al. (2016), for example, studied on the influence of parental involvement on academic achievement involving 406 Form Five students in nine schools in Limbang, Sarawak, Malaysia. The findings showed that the level of parental involvement was high. There is a significant influence of parental involvement on children's academic achievement. Parents are encouraged to engage in continuous involvement in their children's education. Parental involvement in education should be continued until the completion of secondary school studies.

A study conducted by Kimaro & Machumu (2015) found a positive relationship between parental involvement in school activities and children's academic standing. Parental involvement pertains to two settings namely home and school, and the association between them and children's academic performance were the focal point of the study. Importantly, the study revealed a significant and positive relationship between parental involvements and their children's academic achievement. As a matter of fact, parental engagement on provision of key school items, children school work at home and mutual interaction with children about future schooling were revealed to produce positive impacts on children's academic achievement. Moreover, parent-teacher conferences and face-to-face contact between parents and teachers were perceived to be the most natural and desirable systems of communication that may improve not only children's school outcome but also discipline, attitude and attendance rates.

Similarly, Rafiq et al. (2013) explored the effect of parental involvement in the academic achievement of children in Allama Iqbal Town, Lahore city in Pakistan. A total of 150 students of 9<sup>th</sup> class of secondary schools (public and private) were taken as respondents. It was found that parental involvement has significant effect in better academic performance of their children.

Several studies previously carried out in Sri Lanka were related to the performance of students in primary and secondary schools in non-plantation settings such as rural and urban areas (Ranatunga, 2013; Nimal, 2008; Gunaratne, 2007). Ranatunga (2013) in her study on the impact of family-related factors on the performance

of secondary school children revealed that, family related factors such as parental involvement and educational qualifications of parents' had significant relationship with students' performance.

The above-mentioned studies revealed that the involvement of parents is important in enhancing the child's academic performance. However, the studies were conducted in urban settings and there is a dearth of studies which focuses on the educational performance of the plantation-based students and other disadvantaged children. For historical reasons plantation sector schools had to wait about twenty years to be integrated into the national education system in Sri Lanka (Thanaraj, 2004; Ramathass, 2013 & 2019)<sup>ii</sup>. Hence there is a dearth of studies that focused on the educational performance of the plantation and other disadvantaged children. Therefore, the present study intended to fill the knowledge gap on the impact of family related factors on students' academic performance and also attempt to suggest relevant suggestion to promote education of such children.

## **2. Methodology**

This study was conducted using a questionnaire consisting of two sections, the first section deals with the demography of the students and the second section measures the students' perception of family-factors under three dimensions namely parental involvement, psycho-social environment of family and physical environment at home. Students' perception on family factors are collected by using a five-point Likert-scale rating from 1 (strongly disagree) to 5 (strongly agree), with 3 being neutral. The dimension of parental involvement was measured by using eight items which includes for example, appreciating the academic success of the student and regular school visits of the parents to discuss with the class or subject teacher. Furthermore, under the dimension of psycho-social environment of family the questionnaire includes four items which measures for example the psychological and social relationship among the family as well as the relationship with the neighbours. As for the physical environment dimension, the questionnaire measures as to what extent the student have a place in his/her house where the physical environment and other facilities such as furniture are conducive for learning. Instruments for measuring the above three dimensions were adapted from Zarookdeen (2008) and Dharmawardhana (1995). In addition, the examination scores of students are collected from sample schools by tracing the examination results with the permission of the Director of Education and the sample school principal.

A total of 702 respondents (Grade-11 students) from plantation sector secondary schools in two districts namely Nuwara-Eliya and Ratnapura participated in this survey.

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<sup>ii</sup> Dualism in education was removed by the Assisted Schools and Training College Act of 1960 by which almost all the missionary schools were taken over by the government in Sri Lanka. But about 800 plantation schools were not integrated into the national education system until the late part of 1970s, by which period the statelessness of the plantation people was solved.

When the population consists of a number of subgroups, or strata that may differ in the characteristics being studied it is often desirable to use a stratified sampling (Ary et al. 2010). For example, the sample schools of the present study involved into three types (strata) such as type 1AB, type 1C and type 2 schools. Type 1AB schools have General Certificate of Education (Advanced Level) science stream. Type 1C schools have Advanced Level classes without science stream and the type 2 schools have classes upto Ordinary Level. Therefore, the present study followed stratified sampling. The sample schools varied by the quality of human and physical resources, infrastructure, and the socio-economic status etc.

Previous studies have proved that there is significant relationship between (a) parental involvement and student performance; (b) between psycho-social environment and student performance and (c) physical environment and student performance (Ranatunga, 2013; Azam, 2012; Muola, 2010; Zarookdeen, 2008; Smith & Hausafus, 1998).

Based on the above studies the following three hypotheses were formulated to study the situation in the plantation sector in Sri Lanka. It should be mentioned here that the above studies have not significantly focused on plantation sector schools in Sri Lanka.

**H1a:** There is a significant relationship between parental involvement and students' performance.

**H1b:** There is a significant relationship between psycho-social environment of family and students' performance.

**H1c:** There is a significant relationship between physical environment at home and students' performance.

Hypothesis H1a has 6 items such as, for example, relationship among family members etc. These items were formulated based on Likert scale. Hypothesis H1b has 6 items such as, for example, availability of quiet place at home for better learning and necessary furniture and study materials etc. Hypothesis H1c has 6 items such as, for example, appreciation the academic success of the student, regular school visits to discuss with teacher with regard to the child progress etc.

### 3. Results

Pearson correlation technique was used to test the relationship between family factors and students' performance score in mathematics and the results are shown in Tables 1, 2 and 3.

**Table 1:** Correlation between parental involvement and student academic performance

		Marks	Parental Involvement
Pearson Correlation	Marks	1.000	.506
	PI Mean	.506	1.000
Sig. (1-tailed)	Marks		.000
	Parental Involvement	.000	

Dependent Variable: Student academic performance (Marks)

Key: Table 1

PI- Parental Involvement

As shown in Table 1, the p-value indicates a statistically significant relationship between parental involvement and students' performance.

**Table 2:** Correlation between psycho-social environment of family and students' academic performance

		Marks	PEF
Pearson Correlation	Marks	1.000	.284
	PEF	.284	1.000
Sig.	Marks		.023
	PEF	.023	

Dependent Variable: Student Performance Score (Marks)

Key: Table 2

PEF- Psycho-social Environment of Family

As shown in Table 2, the p-value indicates a statistically significant relationship between psycho-social environment of family and students' performance.

**Table 3:** Correlation between physical environment at home and students' academic performance

		Marks	PEH
Pearson Correlation	Marks	1.000	.458
	PEH	.458	1.000
Sig.	Marks		.000
	PEH	.000	

Dependent Variable: Student Performance Score (Marks)

Key: Table 2

PEH- Physical Environment at Home

As shown in Table 3, the p-value indicates a statistically significant relationship between physical environment at home and students' performance.

#### 4. Findings and Discussion

The significant relationship implies that parental involvement such as appreciating the academic success of the student and regular school visits to discuss with the class or subject teacher will help students to achieve more academic success (Larocque et al. (2011), Azam (2012), Rafiq et al. (2013) and Ranatunga (2013).

The result of the current study is in line with the findings of Ranatunga (2013) which indicate that parental involvement and motivation on the education of their children had statistically significant relationship with their achievement. Similarly according to Rafiq et al. (2013) family support has significant positive effect on academic performance of their children. Azam (2012) who revealed that most of the students have a positive tendency to seek help from their parents towards academic activities while Larocque et al. (2011) stated that the value of parental participation is widely accepted. Therefore, closing the achievement gap and increasing student learning require the

collaboration of various interest groups, most notably, parents. Families play an important role in improving the performances at school which meets their child's needs.

## **5. Conclusion**

In conclusion, these findings indicate that families play an important role in improving the performances of children at school. Positive psycho-social environment in the family, suitable physical environment and other resources at home and adequate involvement of parents on children's schooling and other activities would lead to better performance. Thus family plays a pivotal role on increasing students' performances.

### **5.1 Suggestions and Recommendations**

Parental involvement such as appreciating the academic success of the student, regular school visits to discuss with the class or subject teacher definitely help the student to achieve more academic success. When the student gets better performance, he/she expects parental appreciations in the forms of words as well as gifts etc. Therefore, parents should be involved in a positive manner in order to enhance their children's academic performance.

The results of the present study found a statistically significant relationship between psycho-social environment in the family and students' performance. Psycho-social environment refers to the psychological and social relationship among the members of the family as well as the relationship with the neighbours. Positive relationship within the family helps the student to maintain an emotional balance within his/herself which in turn reflects various relationships in the classroom and school environment. Such positive psycho-social environment in the family and in the neighbourhood results in a higher level academic performance of the student. Therefore, parents should maintain a positive psycho-social environment in the family in order to enhance their children's academic performance.

Physical environment and facilities are important for the students to perform well at school. The student should have a place with adequate physical facilities in his/her home where he/she can keep books and other materials and also sit peacefully and do the homework and read books, etc. Therefore, the parents are expected to provide these physical resources and conducive environment for learning.

### **5.2 Limitations of the Study**

The present study was conducted secondary in schools in the plantation sector in Sri Lanka. Hence, there is a limitation in applying the findings of this study to all schools in the country due to the different cultural and socio-economic difference among these schools. However, the findings of the study may be relevant to similar schools in plantation area.

## References

- Ary, D., Jacobs, L. C., & Shrensen, C. (2010). *Introduction to Research in Education, Eighth edition*, Wadsworth, CA, 94002-3098, USA.
- Azam, M. G. (2012). *Factors affecting students' English achievement at secondary level in Bangaladash: the comparative study of Narayangani and BholaSadarUpazilla*. Unpublished Master's Thesis, Graduate School for International Development and Cooperation, Hiroshima University.
- Chohan, B. I. & Khan, R. M. (2010). Impact of parental support on the academic performance and self-concept of the student. *Journal of Research and Reflections in Education*, Vol.4, No.1, 14-26.
- Dharmawardhana, H. M. K. (1997). *A Study on the Influence of Socio-Economic and other factors on pupils who failed in all four subjects at the G.C.E. (A/L) held in 1995*. Department of Research and Development, National Institute of Education, Maharagama, Sri Lanka.
- Gunaratne, P. A. M. P. P. (2007). *An investigation on the achievement of primary students and the family environment*, Unpublished M.Phil. Thesis, University of Colombo, Sri Lanka. (Sinhala Version).
- Kimaro, A. R. & Machumu, H. J. (2015). Impacts of parental involvement in school activities on academic achievement of primary children. *International Journal of Education and Research*, Vol.3, No.8, 483-494.
- Larocque, M., Kleiman, I., & Darling, S. (2011). Parental involvement: The mission, link in school achievement. *Preventing School Failure*, 55(3), 115-122.
- Muola, J. M. (2010). A study of the relationship between academic achievement motivation and home environment among standard eight pupils. *Educational Research and Reviews*, 5(5): 213-217.
- Nimal, W. A. (2008). *A critical study on the influence of the school and socio-economic factors in the achievement of students: A special reference on Hambantota District Rural schools*, Unpublished M.Ed. Thesis, University of Colombo, Sri Lanka. (Sinhala Version).
- Ramathass, P. (2013). *Deployment of Teachers in Plantation Sector and Its Impact on the Quality of Education with Special Reference to Tamil Medium Schools in Hatton Educational Zone*, Unpublished M.Phil Thesis, University of Colombo, Sri Lanka. (Tamil Version).
- Ramathass, P. (2019). *Malayaga samooga abiviruththiyil aasiriyargalin vagipangu, ira sivalingam memorial speech*, Memorial Committee, Colombo, Sri Lanka, (Tamil Version).
- Rafiq, H. M. W., Fatima, T., Sohail, M. M., Saleem, M., & Khan, M. A. (2013). Parental Involvement and Academic Achievement; A Study on Secondary School Students of Lahore, Pakistan. *International Journal of Humanities and Social Sciences*, Vol.3 No.8 (Special Issue –April 2013).

- Ranatunge, R. R. (2013). *A study on the impact of family factors on the educational achievement of the secondary school children in Sri Lanka*. Unpublished M.Phil Thesis. University of Colombo, Sri Lanka. (Sinhala Version).
- Seng, N. L., Hanafi, Z. & Taslikhan, M. (2016). Influence of parental involvement on academic achievement. *International Journal of Advanced Education and Research*. Vol.1.1; Issue 4, 1- 4.
- Shukla, S. Y., Tombari, A. K., Toland, M. D. & Danner, F. W. (2015). Parental support for learning and high school students' academic motivation and persistence in mathematics. *Journal of Educational and Developmental Psychology*, Vol. 5, No. 1, 44-56.
- Smith, F. M., & Hausafus, C. O. (1998). Relationship of family support and ethnic minority students' achievement in science and mathematics. *Science Education*, 82(1):111-125.
- Thanaraj, T. (2004). Problems and Issues in Primary and Secondary Education in the Plantations, *Sandrasegaram manivizha malar*, Colombo, Sri Lanka, pp259-268.
- Zarookdeen, S. S. (2008). *The Achievement level of students in the subject of mathematics and the opportunity for mathematical Education in the Tamil Medium Schools in Kandy District*, Unpublished M.Phil Thesis submitted to the University of Jaffna, Sri Lanka. (Tamil Version).



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